



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 10/06/2003

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/415,461	10/14/1999	RYUICHI AOKI	104526	4858
25944	7590 10/06/2003		EXAMINER	
	RRIDGE, PLC		CALLAHAY	N, PAUL E
P.O. BOX 19928 ALEXANDRIA, VA 22320		•	ART UNIT	PAPER NUMBER
			2134	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>▼</b>						
	Application No.	Applicant(s)				
	09/415,461	AOKI, RYUICHI				
Office Action Summary	Examiner	Art Unit				
	Paul E. Callahan	2134				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status	Ootobor 1000					
<u> </u>	Responsive to communication(s) filed on <u>14 October 1999</u> .					
· —	nis action is non-final.					
3) Since this application is in condition for allows closed in accordance with the practice under Disposition of Claims						
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application	1					
,— ,, — ,	4a) Of the above claim(s) is/are withdrawn from consideration.					
	Claim(s) is/are allowed.					
	☐ Claim(s) 1-13 is/are rejected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers	•					
9) The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on is/are: a)⊠ acce	pted or b)⊡ objected to by the Exa	miner.				
Applicant may not request that any objection to th	e drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).				
11) The proposed drawing correction filed on	_ is: a)☐ approved b)☐ disappro	ved by the Examiner.				
If approved, corrected drawings are required in re	ply to this Office action.					
12)☐ The oath or declaration is objected to by the Ex	aminer.					
Priority under 35 U.S.C. §§ 119 and 120	•					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:	a)⊠ All b)□ Some * c)□ None of:					
<ol> <li>Certified copies of the priority document</li> </ol>	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority document	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the prio application from the International Bu</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).	-				
4) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language pro	ovisional application has been rec	eived.				
15) Acknowledgment is made of a claim for domest Attachment(s)	ic priority under 35 U.S.C. 99 120	anu/UL 121.				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		r (PTO-413) Paper No(s) Patent Application (PTO-152)				
Notice of Dransperson's Patent Drawing Review (P10-946)  3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3		atont Application (F 10-102)				

#### **DETAILED ACTION**

1. Claims 1-13 are pending in this application and have been examined.

### **Priority**

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 5-11are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claim 5 is directed towards a client-server model. A review of fig. 1, item 100 indicates that the server and clients are the only discrete entities in the system with the depositories resident on the server as indicated by fig. 1 items 102. The language of claim 5 however, indicates that the depositories are separate entities from the server and are in communication with it via public key encryption. It is unclear from the language of claim 5, when read in light of fig. 1, whether the applicant contemplates the depositories as discrete entities or as resident storage areas or modules on the server that communicate with another recovery module on the server via public key encryption. Claims 6-11 are dependent on claim 5 and are rejected on the same basis as that claim.

Application/Control Number: 09/415,461

Art Unit: 2134

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-4, 12, and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fischer (US 5,436,972).

As per claims 1 and 12, Fischer teaches an encryption key depositing apparatus (Abstract) comprising: a unit that generates an encryption key for a user (col. 1 lines 20-30); and a unit that starts a process in response to the generation of said encryption key (col. 5 lines 24-30, col. 6 lines 25-45), said process allowing a depositary deposited with said generated encryption key to store said key in a subsequently recoverable manner (col. 6 lines 25-45).

As per claim 2, Fischer does not explicitly teach the encryption key depositing apparatus according to claim 1, wherein said encryption key is a private key of a public key cryptosystem, however Fischer does contemplate the user having a public / private key pair (claim 6), and contemplates the escrow of all types of secret data (col. 2 lines 24-36). Therefore it is clear that Fischer does contemplate escrow of a user's private key of a public / private key pair.

Application/Control Number: 09/415,461

Art Unit: 2134

As per claim 3, Fischer teaches the encryption key depositing apparatus according to claim 1,

further having rules established as a basis for determining said depositary, said encryption key

being stored in accordance with said rules (col. 3 lines 23-30).

As per claim 4, Fischer teaches the encryption key depositing apparatus according to claim 1,

further comprising a server and clients (fig. 1), wherein recovery information for recovering said

encryption key is encrypted by a public key of said depositary and retained in said server (fig. 5

item 1050, 1060).

As per claim 13, the claim represents a computer program product causing an apparatus to carry

out the method of claim 1 and it therefore rejected on the same basis as claim 1.

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents teach key recovery systems similar to that of the applicant.

Young et al.

US 6,282,295

Blaze

US 5,721,777

Al-Salqan

US 6,549,626

Yahya Al-Salqan: "Cryptographic Key Recovery" IEEE 1997

Pierre-Alain Fouque et al.: "Recovering Keys in Open Networks" IEEE 1999

Page 4

Application/Control Number: 09/415,461

Art Unit: 2134

Adam Young and Moti Yung: "Auto-Recoverable Auto-Certifiable Cryptosystems" Eurocrypt 1998, LNCS 1403, pp. 17-31.

Page 5

Dorothy Denning: "Descriptions of Key Escrow Systems" Communications of the ACM 1997.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (703) 305-1336. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse, can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is: (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

9/26/03

Poul Callahan